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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/373,837	08/13/1999	METIN AYDEMIR	RA999-005	2996

25299 7590 10/23/2002

IBM CORPORATION
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RESEARCH TRIANGLE PARK, NC 27709

EXAMINER

PHILIP, NOBEL A

ART UNIT	PAPER NUMBER
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2697

DATE MAILED: 10/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/373,837

Applicant(s)

AYDEMIR ET AL. *h*

Examiner

Nobel Philip

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 13 August 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.
2. The drawings are objected to because blocks in Figures 1 and 2 lack labeling. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because in lines 7 and 9, the term "said" should be avoided. Correction is required. See MPEP § 608.01(b).

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Claim Objections

5. Claims 10 and 22 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 10 and 22 express the same claims of 1 and 13 respectively, and fails to further limit them.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Fichou, U.S. Patent No. 5,790,522.

- Referring to claims 1 and 13, Fichou discloses a method for congestion control within a switch having at least one input section that includes an input buffer (i.e. receive adapters with buffers 42, shown in Figure 4). The data is transmitted from the input section to an output section through a switching fabric (col. 6, lines 13-31). Data transmission is paused when congestion is detected within the switching fabric or output section (col. 8 lines 2-6). The input buffer level is determined (col. 7 lines 61-64). The

delay of restarting data transmission is determined according to the input buffer occupancy (col. 8 lines 12-17).

- Referring to claims 2 and 14, Fichou further teaches that the data switch contains an output buffer (queue) and a backpressure signal generator within the switch fabric used when switch congestion is detected (col. 5 lines 15-20, 30-32).

- Referring to claims 3 and 15, Fichou further teaches a backpressure signal indicates the existence of congestion conditions (col. 8 lines 26-27).

- Referring to claims 4 and 16, Fichou further discloses that data transmission is paused when a backpressure signal is received, meaning congestion is detected (col. 8 lines 2-6).

- Referring to claims 5 and 17, Fichou further teaches that in practice, congestion is detected when output queue is full, meaning high level of occupancy (col. 5 lines 15-18).

- Referring to claims 6 and 18, Fichou further discloses that in practice, the output buffer is monitored and when congestion is detected, a congestion indication signal is generated (backpressure) and delivered to input section, which pauses data transmission (col. 5 lines 15-18).

- Referring to claims 7 and 19, Fichou further discloses that delaying restart of transmission further comprises selecting a timer (col. 8 lines 25-29). It is the position of the examiner that a delay interval was computed when selecting these timers.

- Referring to claims 8 and 20, Fichou further teaches that the delay interval varies inversely with the input buffer level (see Figure 7 and col. 9 lines 55-58).

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- Referring to claims 9-10 and 21-22, Fichou further discloses defining threshold levels for input buffers.

- Referring to claims 11-12 and 23-24, Fichou further discloses that the input buffer values are read and corresponding threshold levels are assigned (col. 9 lines 53-58, col. 12 lines 23-35).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Basso U.S Patent No. 5,787,071 discloses flow control in an ATM network using backpressure primitives.
- b) Fan U.S. Patent No. 6,408,005 discloses a method for controlling overload in a buffer by halting transmission when the load level reaches a threshold.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nobel Philip whose telephone number is 703-305-8395. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 703-305-4798.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

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9. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks
Washington, DC 20231

or faxed to:


(703) 305-3988, (for formal communications intended for entry)

Or:

(703) 305-3988, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal
Drive, Arlington, VA, Sixth Floor (Receptionist).

Nobel Philip *N.P.*
October 16, 2002


RICKY NGO
PRIMARY EXAMINER